



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,383	04/02/2004	Michael E. Gvili	19271-00001	2874

7590 05/23/2006

MIRICK O'CONNELL
MIRICK O'CONNELL, DEMALLIE & LOUGEE, LLP
1700 WEST PARK DRIVE
WESTBOROUGH, MA 01581-3941

EXAMINER

WELCH, GARY L

ART UNIT PAPER NUMBER

3765

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/817,383	Applicant(s) GVILI ET AL.	
	Examiner Gary L. Welch	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-33 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings do not have lines that are uniform thickness or darkness and some details are too small to see clearly. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Reference number "69A" (page 9, line 13) is not illustrated in the drawings

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Reference number "68" (Figure 9) is not provided in the specification

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because it does not appear on a separate paper as required. The submitted abstract is page 2 of the specification. Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: It appears that the following changes are required:

Page 10, line 4: Change "27" to --7--

Page 10, line 8: Change "25" to --30-- (see figure 3)

Page 11, line 18: Delete "linear the" and insert --the linear--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 12 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's brush appears, from the description, to help retain the lint onto the cylinder (i.e., not remove or doff the lint). The examiner is confused how this can be since brushes are typically fabricated from a plurality of bristles which inherently "picks up" the fibers away from the cylinder and prevents them from being retained thereon.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-11, 13, 14, 16-25, 27, 28 and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Hosel (U.S. 6,865,781).

Hosel discloses a lint cleaner 1 having rotating saws (A, B), at least one grid bar (3₁-3_n) having a cleaning edge and an actuator (7a) coupled to the grid bar for moving the grid bar between an engaged position and a disengaged position.

With regard to claim 2, a driver 10 is provided for the actuator which on command sends signals to the actuator to move the grid bar between the engaged and disengaged positions.

With regard to claim 3, an operator interface terminal (13a, 13b) is provided so as to enable command of the driver 10 so as to position the grid bars in the engaged or disengaged positions.

With regard to claims 4 and 18, means is provided for activating the grid bar to a desired position (Col. 4, lines 38-56).

With regard to claims 5 and 19, the means for activating comprises means for using an input trash level measurement (Col. 4, line 57-Col. 5, line 62).

With regard to claims 6 and 20, the input trash level is measured using an imaging means 12.

With regard to claims 7 and 21 a lookup table is employed in response to the input trash level (Col. 6, lines 3-11).

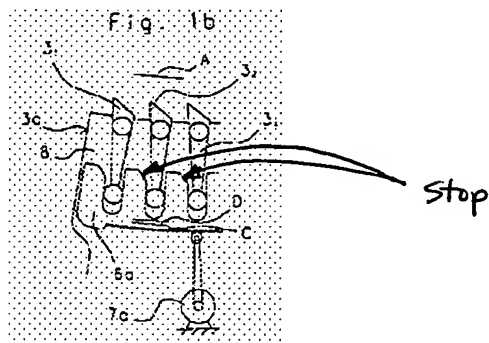
With regard to claims 8, 9, 22 and 23, an output trash level measurement is determined (Col. 5, lines 41-62) via imaging means 12.

With regard to claims 10 and 24, a lookup table is employed in response to the output trash level (Col. 5, line 63-Col. 7, line 10).

Art Unit: 3765

With regard to claims 11 and 25, lint retaining member 6a is coupled to the grid bar 3.

With regard to claims 13 and 27, a movement limiting stop (see figure below) is provided for the grid bar.



With regard to claims 14 and 28, a stop switch is provided for the grid bar thereby preventing over rotation of the grid bar (see figure above).

With regard to claims 16, 30 and 33, the actuator responds to input trash levels, output trash levels and desired output trash levels (Col. 5, line 63-Col. 7, line 10).

With regard to claims 17 and 31, the invention is disclosed in one or more of the above rejected claims.

With regard to claim 32, means is provided for automatically moving the grid bars between the engaged position and the disengaged position (Col. 3, lines 21-45).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosel (U.S. 6,865,781) in view of Anthony (U.S. 6,615,454).

Hosel discloses the invention substantially as claimed above.

However, Hosel does not disclose a lint retaining brush coupled to the grid bar.

Anthony teaches a lint cleaner having a doffer brush 30 positioned adjacent to a saw cylinder 36 having grid bars 37 around the periphery of the cylinder. The brush 30 is a typical doffer commonly associated with various textile machines such as lint cleaners, carding machines, etc. wherein the cleaned lint is stripped from an adjacent cylinders, motes or flats so as to forward the lint to further downstream processing.

Applicant's brush appears, from the description, to help retain the lint onto the cylinder (i.e., not remove or doff the lint). As stated above in the 35 U.S.C. 112, second paragraph rejection, the examiner is confused how this can be since brushes are typically fabricated from a plurality of bristles which inherently "picks up" the fibers away from the cylinder and prevents them from being retained thereon.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a doffer brush as taught by Anthony to the apparatus of Hosel so as to strip away cleaned lint from the cylinder saws and to forward the cleaned lint to further downstream processing.

12. Claims 15 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosel (U.S. 6,865,781) in view of Anthony (U.S. 5,805,452).

Hosel discloses the invention substantially as claimed above.

However, Hosel does not disclose a plurality of lint cleaners in series with a bypass valve so as to bypass one or more of the lint cleaners.

Anthony teaches a plurality of lint cleaners 160 arranged in series having bypass valves 609 arranged therebetween so as to optimize the processing of the cotton.

It would have been obvious to one of ordinary skill at the time the invention was made to provide Hosel with multiple lint cleaners arranged in series having a bypass valve therebetween as taught by Anthony in order to provide optimized processing and cleaning of the cotton.

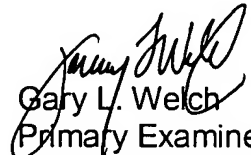
Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art provided on the attached form, PTO-892, lists various lint cleaners having means for adjusting the grid bars between an engaged position and a disengaged position.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Welch whose telephone number is (571) 272-4996. The examiner can normally be reached on Mon-Fri 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gary L. Welch
Primary Examiner
Art Unit 3765

glw